Financing

Water Use Efficiency

The CALFED Bay-Delta Program, a cooperative effort of over 20 State and Federal agencies, funds promising water use efficiency projects throughout the State. DWR is the CALFED State agency designated to manage this grant and loan program through the Office of Water Use Efficiency, Financial Assistance Unit. In 2001, 53 water use efficiency projects were funded for \$12 million split equally between agricultural and urban projects. In 2002, 21 Urban Water Conservation Grants (\$9 million) and 8 Agricultural Water Conservation Feasibility Study Grants (\$0.8 million) were awarded. As well as water savings, these projects will provide water quality improvements and environmental benefits. For more information contact the Office of Water Use Efficiency at (916) 651-9674. Information is also available online at www.water.ca.gov.



Lost Hills Water District Reduces Lost Water

Two projects funded in 2001 consisted of concrete lining approximately 3-1/2 miles of canals. The purpose was to prevent seepage losses to a saline shallow groundwater table. Benefits of the concrete lining include reduction in drainage and maintenance costs.

Anticipated Water Savings: It is estimated that 170 and 110 acre feet per year of water can be saved from the two canal lining projects (approximately 3,230 acre feet and 2,090 acre feet over 20 years).

CALFED Grant: \$754,500 and \$572,100 **Local Cost Share:** \$140,400 and \$78,000

Alameda County Water District Helps Schools Improve Water Management

Alameda County Water District is working to improve water management by helping school districts retrofit large landscape areas. Automated irrigation systems are being installed or upgraded in an

effort to improve watering practices. Sub-meters are being installed to track landscape water use on mixed-use accounts. Central irrigation systems are being installed to control



irrigation from one location within a school district.

Anticipated Water Savings: 10-20% (approximately 125 acre feet

per year;

2,240 acre feet over 20 years)

CALFED Grant: \$125,000 **Local Cost Share:** \$131,700

Metropolitan Water District of Southern California Delivering High Efficiency Clothes Washer Rebates Saves Water and Energy

MWD, in collaboration with their member agencies, is providing 10,000 rebates to customers to purchase High Efficient Clothes Washers. This



regional program provides member agencies with a base \$100 rebate that can be augmented by member agency funds.

Anticipated Water Savings: It is anticipated that the project will achieve water savings of .226 acre feet of water per machine over the 14 year life of the machines (2,260 acre feet for 14 years).

CALFED Grant: \$925,000 Local Cost Share: \$575,000



Santa Clara Valley Water District Developing Data for Landscape Water Budgets

The District is performing area measurement and analysis of Santa Clara County using multi-spectral images. This information will identify different landscape areas for each parcel to prepare a database in conjunction with historical and current weather data using CIMIS. Accurate measurement of urban landscape and agricultural lands will significantly improve the District's demand forecasts and dry-year planning efforts.

Anticipated Water Savings: The water budgets developed through this project are expected to reduce average landscape water use by 10% or 5,000 acre feet per year; 90,000 acre feet over 20 years.

CALFED Grant: \$406,000 **Local Cost Share:** \$229,712

Irvine Ranch Water District X-ray Film Processor Retrofit Recycles Water and Returns Savings

Irvine Ranch Water District, in collaboration with East Bay Municipal Utility District and Upper San Gabriel Valley Municipal Water District, installed Water Saver/Plus water recycling devices on X-ray film processors at seven hospitals. The film processors operate 24 hours a day all year. IRWD tracked water use on the film processors with ordinary water meters one month before installing the water recycling devices and for at least one month after the devices were installed. On one film processor, IRWD also recorded minute-by-minute water flows using a data logger. Verified by the 7-day recorded period, the Water Saver/Plus will save each hospital 8,283 gallons or 1.33 acre-feet of water a year.

Anticipated Water Savings: The results demonstrate a significant reduction in water use with an estimated 97 to 100 percent savings from the seven hospitals over the course of the study. The hospitals' range of water use was 2,240 to 4,529 gallons of water a day before the Water Saver/Plus devices were installed. The Water Saver/Plus reduced water use to a range of 14 to 66 gallons of water a day.

CALFED Grant: \$13,698 Local Cost Share: \$28,000

HOSPITAL	Usage/Day	Est. Usage/yr	Est. Saving/Yr	Savings as AF/yr
Greater El Monte Community Hosp.				
before	4,529	1,652,929		
after	51	18,771	1,634,157	5.02
San Gabriel Valley Medical Center		·		
before	3,687	1,345,807		
after	14	5,214	1,340,593	4.11
Queen of the Valley Hospital		·	·	
before	3,406	1,243,086		
after	56	20,336	1,222,750	3.75
Irvine Regional Hospital				
before	2,174	793,353		
after	37	16,557	779,796	2.39
San Leandro Hospital		,	,	
before .	3,030	1,105,950		
after	58	21,145	1,084,805	3.33
Children's Hospital Oakland		,	,	
before .	2,240	817,730		
after	62	22,682	795,048	2.44
Eden Township Hospital		·		
before	2,921	1,066,321		
after	66	24,116	1,042,205	3.20

Water Use Efficiency Grant Recipients, 2001

Water Use Efficiency Grant Recipients, 2001				
	SB 23 Agricultural Grant Recipients			
Anderson-Cottonwood Irrigation District CalPoly State University—ITRC Center for Irrigation Technology Columbia Canal Company Glenn-Colusa Irrigation District Golden State Irrigation Serv., Inc. Kern-Tulare Water District Lodi-Woodbridge Winegrape Comm. Lost Hills Water District Lost Hills Water District Modesto Irrigation District Orland Unit Water Users' Association Oroville-Wyandotte Irrigation District Pajaro Valley Water Management Agency Placer County Water Agency Reclamation District 108 San Joaquin Valley Drainage Authority Stanislaus RCD, West USDA/Agricultural Research Serv. WaterTech West Hills Community College District Western Canal Water District WCWD	Main Canal Modernization Irrigation Districts' Technical Assistance Variability of Soil Salinity on Farms On-farm Irrigation System Improvements GCID System Optimization for Fisheries, etc. Sub-surface Drip Irrigation of Asparagus Water Use Efficiency Project NPS Pollution Reduction in Vineyards Service Area 5 Distribution System Improvement Service Area 3 Distribution System Improvement On-Farm Ditch and Cast-in-Place Replacement Regional Water Use Efficiency Project OWID Palermo Canal Lining Project On Farm Mobile Lab Real-time Canal Flow Monitoring and Canal Sub-basin Level Water Measurement Program SW Stanislaus Co. Regional Drainage Water Management Irrigation Mgmt. & Dormant Spray Reduction Salt-Tolerant Crops Evaluation Irrigation Scheduling On-farm Integrated Irrigation & Drainage Management WCWD Water Use Efficiency Project Total Utilization of Drainage & Minimization of Evaporation	\$100,000 \$300,000.00 \$175,010.00 \$152,823.00 \$100,000.00 \$299,500.00 \$317,440.00 \$754,500.00 \$572,100.00 \$100,000.00 \$183,000.00 \$99,500.00 \$662,744.00 \$100,000.00 \$160,523.00 \$616,200.00 \$200,000.00 \$200,000.00 \$100,000.00 \$111,280.00		
	TOTAL	\$5,923,744.00		
	SB 23 Urban Grant Recipients			
Alameda Co. Water District Aquacraft, Inc. Blue Planet Foundation Calif. Water Awareness Campaign CalPoly State University—ITRC Contra Costa Water District EI Dorado Irrigation District Elect. & Gas Indust. Association (EGIA) Environmental Policy Center EXPERT, Inc. Irvine Ranch Water District of S. CA Metropolitan Water District of S. CA Munic. Water District of Orange Co. Pacific Institute Pittsburg, City of Regents of University of CA Rose Bowl Op. Company San Diego County Water Authority San Juan Water District—Water Forum Santa Barbara Co. Water Agency Santa Clara Valley Water District Southern California Water Company Water Education Foundation	ACWD Schools & Water Cons.—Large Landscape Demonstration of Water Cons. in Urban Supermarkets Expansion of the Learning to be WaterWise Program Public Information Program Efficient Landscape Water Program A Straight Flush Commercial ULFT Direct Install ULF Toilet Rebates for Low-Income Customer Regional High-Efficiency Washing Machine California Water Conservation Support Network Community Water Education and Training (WET) Joint Agency X-Ray Processor Retrofit Model Commercial Rebate Program High-Efficiency Clothes Washer Rebates New Courses for Bilingual Landscape Education Water Softener Pilot Program Quantifying Cll Demand Side Mgt. Potential The Save Our Delta Surveys (SODS) Water-Wise Demonstration Landscape Brookside Golf Course Water Management. Project Voucher Incentive—Clothes Washers—Residential Sacramento Water Use Efficiency Training Weather TRAK ET Controller Landscape & Ag Area Measurement & Water Budgets San Dimas ET Controller/Rain Shut-off Program Claremont ET Controller/Rain Shut-off Program LA, SW District ET Controller/Rain Shut-off Program Los Osos ET Controller/Rain Shut-off Program Arden-Cordova ET Controller/Rain Shut-off Program San Gabriel Valley Indoor/Outdoor Water Savings Water Conservation and Recycling Awareness	\$125,000.00 \$126,000.00 \$38,000.00 \$250,000.00 \$244,000.00 \$150,000.00 \$150,000.00 \$1,750,875.00 \$115,000.00 \$360,000.00 \$340,000.00 \$100,000.00 \$100,000.00 \$50,000.00 \$50,000.00 \$100,000.00 \$100,000.00 \$23,774.00 \$90,000.00 \$100,000.00 \$100,000.00 \$100,000.00 \$100,000.00 \$110,000.00 \$110,000.00 \$110,000.00 \$110,000.00 \$100,000.		

Orland Water Users Association	Conveyance and Irrigation Efficiency Project	\$100,000
Anderson-Cottonwood Irrig. District	ACID Chum Creek Lateral Improvement Project	\$100,000
Alta Irrigation District	Sandridge and Kennedy Waste Way Pipeline	\$100,000
Coachella Valley Water District	Feasibility Study for CVWD Irrigation System	\$100,000
Western Canal Water District	Tailwater Recovery System	\$100,000
City of Rio Dell	Urban Water System Research and Evaluation Project	\$100,000
City of Trinidad	Urban Water System Research and Evaluation Project	\$100,000
Marina Coast Water District	Water Conservation Feasibility Evaluation and Implementation Plan	\$100,000
Fieldbrook Comm. Service District	Urban Water Conservation Feasibility Study–System Audit	\$100,000
Yucaipa Valley Water District	Water Conservation BMP Evaluation and Implementation Plan	\$ 89,324
East Bay Municipal Utilities District	Oakland Zoo Water Conservation and Recycling Feasibility Study	\$100,000
City of Santa Rosa	Feasibility Study for ETo–Timer Incentive Program	\$ 93,587

TOTAL \$1,182,911

Proposition 13 Water Use Efficiency Grant Recipients, 2002

Agricultural Grant Recipient

Tulelake Irrigation District Evaluation of the Feasibility and Cost Effectiveness of Canal Lining \$99.720.00 Placer County Water Agency Canal and Reservoir Efficiency Feasibility Study \$100,000.00 Solano Irrigation District Spill Reduction Feasibility Study \$89,000.00 Westlands Water District Water Measurement Enhancement Project \$82,500.00 Panoche Water District Herndon Avenue Lateral Feasibility Study \$54,545.00 Banta Carbona Irrigation District Banta-Carbona Irrigation District Modernization Feasibility Study \$99,204.00 Consolidated Irrigation District **Turnout Metering** \$95,000.00 San Jacinto Basin Resource Feasibility of retrofitting to a remote-sensing soil moisture monitoring \$98,033.00 Conservation District and irrigation scheduling system

TOTAL \$718,002.00

Urban Grant Recipients

Bear Valley Community Services District Residential ULFT \$44,000.00 Calaveras County Water District West Point Urban Water Conservation Capital Outlay Project \$1,925,000.00 East Bay Municipal Utility District Pre-Rinse Spray Head and Dishwasher Installation Program \$482,081.00 Goleta Water District Large Meter Project \$85,800.00 Inland Empire Utilities Agency X-Ray film Processor Retrofit Program \$230.000.00 Las Virgenes Municipal Water District Multifamily ULFT and Residential HECW Rebate Program \$145,000.00 \$615,000.00 Los Angeles Dept. of Water and Power Enhanced Rebates and Incentives for Water Saving Devices Marina Coast Water District Water Conservation System Rehabilitation Program \$959,029.00 Pasadena, City of CII Zero Consumption Urinals \$300,000.00 Placer County Water Agency Auburn System Leak Repair \$679,560.00 Pleasantimes Mutual Water Company, Inc. Water Meter Project \$49,000.00 Regional Water Authority, Sacramento Large Landscape Irrigation System Incentive Program \$150,000.00 Regional Water Authority, Sacramento Leak Detection and Repair Program \$386,750.00 Rio Dell, City of Water Use Efficiency 2002 \$714,910.00 Rohnert Park, City of Water Meter Project \$1,276,548.00 San Diego County Water Authority Multi-Load Clothes Washer Voucher Incentive Program \$350,000.00 Santa Clara Valley Water District Dedicated Landscape Meter Program \$100,000.00 Santa Clara Valley Water District Water Softener Pilot Project \$60,000.00 Solano County Water Agency Large Landscape ET Controller System Project \$195,000.00 Upper San Gabriel Valley MWD Olive Sports Park Model Water Efficient Landscape Project \$56,278.00

Residential ULFT Project

TOTAL \$8,873,956.00

\$70,000.00

Victor Valley Water District